



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Bruce C. Beihoff et al.

§
§
§ Group Art Unit: 2835

Serial No.: 10/663,523

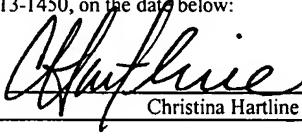
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§ Examiner: Datskovskiy, Michael V.

Filed: September 16, 2003

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§ Atty Docket: ALBR:0126/YOD
03AB106

For: ELECTRICAL POWER
CONVERTER METHOD AND
SYSTEM EMPLOYING MULTIPLE-
OUTPUT CONVERTERS

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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April 8, 2005 Date	 Christina Hartline

Dear Sir:

LETTER

It has come to Applicants' attention that a recently submitted Preliminary Amendment for the above-referenced application may have been incorrectly associated with the parent application of the present case. The present application, Serial No. 10/663,523, was filed on September 16, 2003, as a continuing application of application Serial No. 10/252,296. The Preliminary Amendment for the present case was also originally filed on September 16, 2003. However, a Notice of Non-Compliant Amendment was mailed by the USPTO on March 7, 2005, noting several informalities of the amendment. Subsequently, Applicants filed a revised Preliminary Amendment correcting these informalities on March 21, 2005. A courtesy copy of

this Preliminary Amendment and associated postcard is provided herewith. Unfortunately, after referencing PAIR, Applicants believe that the Preliminary Amendment mailed March 21, 2005, was mistakenly associated with application Serial No. 10/252,296 (which has already been allowed), instead of application Serial No. 10/663,523 (which has yet to be examined). Accordingly, Applicants respectfully request correction of this error, including association of this Preliminary Amendment with the above-identified application (Serial No. 10/252,296) and removal of the Preliminary Amendment from the Image File Wrapper of application Serial No. 10/252,296.

Respectfully submitted,

Date: April 8, 2005

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Please indicate receipt of
the below-identified paper:

New Application Specification: _____ Pages; Drawings: _____ Sheets
 Continuation Divisional CIP CPA
 Response to Office Action dated _____ Final Rejection
 Other Preliminary Amendment; Postcard

Assignment enclosed Cert. Of Timely Mailing Express Mail

Identification of Application:

Serial No. 10/663,523

Title Electrical Power Converter Method and System Employing
Multiple-Output Converters

Applicant Bruce C. Beihoff et al.

Client Rockwell

File No. ALBR:0126 03AB106 Attorney YOD/EUB

Mailed 03/21/05 Filed 09/16/03 Due Date _____

COPY



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Bruce C. Beihoff et al.

§ Group Art Unit: 2835

Prior Application Serial No.: 10/252,296

Prior Application Filed: December 18, 2002

Serial No.: 10/663,523

§ Examiner: Datskovskiy, Michael V.

Filed: September 16, 2003

For: ELECTRICAL POWER
CONVERTER METHOD AND
SYSTEM EMPLOYING MULTIPLE-
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March 21, 2005

Date

Carla Deblaw

Carla Deblaw

Dear Sir:

PRELIMINARY AMENDMENT

Prior to calculation of the filing fees and to examination of the above-referenced application, please amend the application as follows:

COPY



Serial No. 10/663,523
Preliminary Amendment
Page 2

IN THE SPECIFICATION

Please amend the specification by inserting before the first line the sentence:

This application is a Continuation of application Serial No. 10/252,296 filed December 18, 2002.

IN THE CLAIMS

1 – 52. (canceled)

53. (new) A power converter system comprising:
a thermal support configured to receive and circulate a coolant stream for extraction of heat;
a first power converter circuit secured to and cooled by the support, the first power converter being configured to receive input power and to convert the input power to first output power having desired characteristics; and
a second power converter circuit secured to and cooled by the support, the second power converter being configured to receive input power and to convert the input power to second output power having desired characteristics different from those of the first output power.

54. (new) The system of claim 53, wherein at least one of the first and second converter circuits is configured to perform AC-to-AC conversion.

55. (new) The system of claim 53, wherein at least one of the first and second converter circuits is configured to generate three-phase output power.

56. (new) The system of claim 53, wherein at least one of the first and second converter circuits is configured to receive DC input power.

57. (new) The system of claim 53, wherein the support at least partially defining an electric reference plane for operation of the first and second converter circuits.

58. (new) The system of claim 53, wherein the support includes a channel for receiving a cooling medium, and wherein each of the converter circuits includes a substrate having a passage in fluid communication with the channel of the support for cooling the converter circuits during operation.

59. (new) The system of claim 58, comprising a flow control valve for regulation of fluid flow though the support.

60. (new) The system of claim 59, comprising a thermal sensor coupled to the flow control valve to permit closed loop control of fluid flow though the support.

61. (new) The system of claim 53, wherein the first and second converter circuits are configured to operate independently of one another.

62. (new) A power converter system comprising:
a backplane for routing electrical power and thermal energy;
a first power converter secured to the backplane, the first power converter including power electronics circuit configured to produce first output power having desired characteristics; and
a second power converter secured to the backplane, the second power converter including power electronics circuitry configured to produce second output power independently of the first power converter.

63. (new) The system of claim 62, wherein the first output power has electrical characteristics different from those of the second output power.

64. (new) The system of claim 63, wherein the first output power is three-phase power and the second output power is single-phase power.

65. (new) The system of claim 62, wherein the backplane includes a channel for circulation of a cooling medium.

66. (new) The system of claim 65, wherein at least one of the first and second converters includes a passage in fluid communication with the channel for receiving the cooling medium.

67. (new) The system of claim 62, wherein the backplane routes electrical power to and from the converters.

68. (new) The system of claim 62, wherein at least one of the first and second converters is configured to perform AC-to-AC power conversion.

69. (new) The system of claim 62, wherein at least one of the first and second converters is configured to generate three-phase output power.

70. (new) The system of claim 62, wherein at least one of the first and second converters is configured to receive DC input power.

71. (new) A power converter system comprising:

a backplane for routing electrical power and thermal energy, the backplane includes a channel for circulation of a cooling medium;

a first power converter secured to the backplane, the first power converter including power electronics circuit configured to produce first output power having desired characteristics; and

a second power converter secured to the backplane, the second power converter including power electronics circuitry configured to produce second output power independently of the first power converter;

wherein at least one of the first and second converters includes a passage in fluid communication with the channel for receiving the cooling medium.

72. (new) The system of claim 71, wherein the backplane routes electrical power to and from the converters.

73. (new) The system of claim 71, wherein at least one of the first and second converters is configured to perform AC-to-AC power conversion.

74. (new) The system of claim 71, wherein at least one of the first and second converters is configured to generate three-phase output power.

75. (new) The system of claim 71, wherein at least one of the first and second converters is configured to receive DC input power.

76. (new) A method for converting electrical power, the method comprising: converting input power to first output power having first desired characteristics; converting input power to second output power having second desired characteristics; routing the input power and output power to external circuitry via a shared support.

77. (new) The method of claim 76, wherein the first and second output power have different desired characteristics.

78. (new) The method of claim 76, wherein at least one of the first and second output power is three-phase power.

79. (new) The method of claim 76, wherein the first and second output power are generated independently on one another.

80. (new) The method of claim 76, further comprising circulating a cooling medium through the shared support and converters generating the first and second output power.

81. (new) A method for converting electrical power, the method comprising: converting input power to first output power having first desired characteristics; converting input power to second output power having second desired characteristics; and routing the input power and output power to external circuitry via a shared support; and circulating a cooling medium through the shared support and converters generating the first and second power to remove heat generated during operation.

82. (new) A system for converting electrical power, the method comprising:
means for converting input power to first output power having first desired characteristics;
means for converting input power to second output power having second desired
characteristics;

means for routing the input power and output power to external circuitry via a shared
support.

83. (new) A method for converting electrical power, the method comprising:
means for converting input power to first output power having first desired characteristics;
means for converting input power to second output power having second desired
characteristics;

means for routing the input power and output power to external circuitry via a shared
support; and

means for circulating a cooling medium through the shared support and means for
converting to remove heat generated during operation.

REMARKS

Claims 1-52 have been canceled without prejudice. New claims 53-81 have been added. Consideration of the application as amended is respectfully requested. If the Examiner believes that a telephonic interview will help speed this application toward issuance, Applicants invite the Examiner to contact the undersigned at (281) 970-4545.

Respectfully submitted,

Date: March 21, 2005

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